

Lab 0

Code Composer Studio V5 with DSK6713

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These set of instructions use code composer studio v5 with DSK6713 board.¹

1 One time setup

1. Get the support files from Spectrum digital

<http://c6000.spectrumdigital.com/dsk6713/V2/files/DSK6713.zip>

unzip the file under `C:\`. The folder will be labeled `dsk6713`

2. Get files that will be frequently used

http://www.ee.nmt.edu/~elosery/fall_2016/ee451/labs/files/C6713_support_CCS_V5_ver2.zip

unzip the file under `C:.`. The folder will be labeled `C6713_support_CCS_V5`

2 Starting a New Project

- Start Code Composer Studio.
- Start a new CCS project.
 - Variant: `DSK6713`
 - Connection: `Spectrum Digital DSK-EVM-eZdsp onboard USB Emulator`
 - Compiler Version: Select `TI v.7.4.16`
 - Output Format: Select `legacy COFF`
 - Runtime support library: `rts6700.lib`

¹Digital Spectrum still sells DSK6713 with CCSv3 meant to run on XP. Thanks to Darrell Thomas we can easily use CCSv5. This information was compiled from http://e2e.ti.com/support/dsp/tms320c6000_high-performance-dsps/f/115/t/215890.aspx

- On the left column of CCS your new project will show up. Right click on the name of the project and select **Properties**.
- C6000 Compiler tab
 - Target Processor Version: 6700
 - Include Options tab:
\$CG_TOOL_ROOT/include
C:\EE\CodeComposer_V6\dsk6713\c6000\dsk6713\include
C:\EE\CodeComposer_V6\dsk6713\c6000\bios\include
 - Advance tab
 - * Predefined Symbols tab: CHIP_6713
 - * Runtime Model Options: Data access model (--mem_model:data) far
- Linker tab
 - File Search Path:
C:\EE\CodeComposer_V6\dsk6713\c6000\dsk6713\lib\dsk6713bs1.lib
C:\EE\CodeComposer_V6\dsk6713\c6000\bios\lib\cs16713.lib

3 Copy Needed Files

- Copy the following files from C:\EE\CodeComposer_V6\C6713_support to the folder containing your project
 - C6713dsk.cmd
 - c6713dskinit.c
 - c6713dskinit.h
 - dsk6713_aic23.h
 - dsk6713.gel
 - Vectors_poll.asm if using polling or Vectors_intr.asm if using interrupts.

4 Final Step

- In CCS double click on Target Configuration
- Click on advanced
- Click choose the gel file that you just copied to your directory